

Work Order ID 62029

Page 1

Wednesday, September 15, 2010 9:12:53 AM

Item ID: D206-667-203TRN

Accept



Setup Start



Revision ID:

Item Name: Crosstube Turning Detail

Stop



Start Date: 9/15/2010 Start Qty: 1.00



Cust Item ID:

Required Date: 9/22/2010 Req'd Qty: 1.00



Customer:

Reference:

Approvals: Process Plan:



Date: 10/9/15

Tooling:

Date:

Run Start



QC:

Date:

SPC (Y/N):

Date:

Stop

Sequence ID/
Work Center IDOperation
DescriptionSet Up/
Run Hours

Tool ID

Tool #

Plan
CodeAccept
QtyReject
QtyReject
NumberInsp.
Stamp

Draw Nbr	Revision Nbr
D206-667-243	Rev C

100



MORI SEIKI CNC LATHE LARGE

Mori Seiki

Mori Seiki CNC Lathe Large

Memo

0.00

A.M 10-09-200

1-Fill tube with sand & install plugs DT8534 on both ends as per Folio FA089
2-Turn first side as per Folio FA089
3-File down transition lines smooth.

110



QC1- Inspect dimensions to dimension sheet

0.00

QC

Quality Control

Memo

0.00

A.M 10-09-200

120



MORI SEIKI CNC LATHE LARGE

Mori Seiki

Mori Seiki CNC Lathe Large

Memo

0.00

1-Turn second side as per Folio FA089
2-File down transition lines smooth.
3-Remove sand and plugs
4-Scrib part# and batch #

A.M 10-09-200

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

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Run

Start



QC: _____ Date: _____ SPC (Y/N): _____ Date: _____

Stop

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Run Hours

Tool ID

Tool #

Plan
CodeAccept
QtyReject
QtyReject
NumberInsp.
Stamp

130



QC

QC1- Inspect dimensions to dimension sheet

Quality Control

140



QC

QC8- Inspect parts - second check

Quality Control

150



HandFXtube

Crosstubes Chemical Conversion

Hand Finishing Crosstubes

Memo

0.00

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Tooling: _____

Date: _____

Run Start



QC: _____

Date: _____

SPC (Y/N): _____

Date: _____

Stop

Sequence ID/
Work Center IDOperation
DescriptionSet Up/
Run Hours

Tool ID

Tool #

Plan
CodeAccept
QtyReject
QtyReject
NumberInsp.
Stamp

160



QC3- Inspect Part Finish

0.00

QC

Quality Control

(IX) Q uB 10-09-21

170



Packaging

0.00

Packaging

Packaging

Memo

0.00

Identify and Stock in kanban rack Location: Crosstube cell

(IX) Q uB 10-09-21

180



QC21- Final Inspection - Work Order Release

0.00

QC

Quality Control

Memo

0.00

10/09/21 JF

MF
10-9-21

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Picklist Print

Wednesday, September 15, 2010 9:12:59 AM

Page 1

Work Order ID: 62029



Parent Item: D206-667-203TRN



Parent Item Name: Crosstube Turning Detail

Start Date: 9/15/2010

Required Date: 9/22/2010

Start Qty: 1.00

Required Qty: 1.00

Comments: IPP Rev:A 08-03-06 new issue DD verified by:ec
IPP Rev B 08.04.02 Removed polish EC verified by: DD
IPP Rev C 09.01.06 ECN 08-562 EC verified by:DD

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Qty per Kit	Total Qty	Qty Issued	Date Issued	Status
D6004-115		Manufactured		No		100	Each	58.0000	1	1		0	10-09-2010

Crosstube Material



Location	Loc Qty	Loc Code
LG	58	
34685	17	
34774	5	
38336	36	1

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NOTE: Date & initial all entries

DART AEROSPACE LTD		Work Order:	62029
Description: Crosstube Assembly		Part Number:	D206-667-243
Inspection Dwg: D206-667-243	Rev: C		Page 1 of 1

FIRST ARTICLE INSPECTION CHECKLIST

Inspection Sheet Drawing Dimension	Tolerance	Actual Dimension	Accept	Reject	Method of Inspection	Comments
SIDE A	2.490	+0.005/-0.000	2.490	/	Vern A.M-01	
	2.018	+0.005/-0.000	2.023	/		
	2.079	+0.005/-0.000	2.084	/		
	2.145	+0.005/-0.000	2.150	/		
	2.209	+0.005/-0.000	2.214	/		
	2.287	+0.005/-0.000	2.292	/		
	2.363	+0.005/-0.000	2.368	/		
	2.433	+0.005/-0.000	2.438	/		
	0.200	+/-0.010	0.200	/		
	0.500 x 30°	+/-0.010	0.500 x 30°	/		
	R0.063	+/-0.010	R0.063	/	R-G	
	R0.500	+/-0.010	R0.500	/	R-G	
	4.438	+/-0.030	4.438	/	Vern A.M-04	
	104.91	+/-0.020	104.90	/	TM - AM-01	
SIDE B	2.490	+0.005/-0.000	2.490	/	Vern A.M-04	
	2.018	+0.005/-0.000	2.023	/	Vern A.M-04	
	2.079	+0.005/-0.000	2.084	/		
	2.145	+0.005/-0.000	2.150	/		
	2.209	+0.005/-0.000	2.214	/		
	2.287	+0.005/-0.000	2.292	/		
	2.363	+0.005/-0.000	2.368	/		
	2.433	+0.005/-0.000	2.438	/		
	0.200	+/-0.010	0.200	/		
	0.500 x 30°	+/-0.010	0.500 x 30°	/		
	R0.063	+/-0.010	R0.063	/	R-G	
	R0.500	+/-0.010	R0.500	/	R-G	
	4.438	+/-0.030	4.438	/	Vern A.M-04	
					TM, 20 measure A.M-01	

Measured by:	Q.M	Audited by:	S	Preliminary Approval:	N/A
Date:	10.09.20	Date:	10/09/20	Date:	N/A

Rev	Date	Change	Revised by	Approved
A	06.09.01	New Issue (P/O D206-667-203)	KJ/JLM	
B	10.08.25	Dwg Rev updated	KJ	

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8 7 6 5 4 3 2 1

Item	Qty	Part Number	Description
1	X	D206-667-243	CROSSTUBE ASSEMBLY (206L HIGH AFT)
2	1	D6004-115	CROSSTUBE
3	2	D2873-043	NUT PLATE
4	2	D2873-045	NUT PLATE
5	2	D2892-1	SUPPORT
6	4	D3595-063-450	RUBBER CUSHION
7	4	MS21920-22	CLAMP
8	14	MS20601AD4W10	RIVET (OR NAS9302B-4-10)
9	A/R	MAGNOBOND 6398	ROCKWELL SPECIFICATION RBO-120-023 ADHESIVE (TEXTRON/BELL SPEC. 299- 947-100; TYPE II, CLASS 2 ADHESIVE)

GENERAL NOTES:

- 1) MATERIAL: MANUFACTURED FROM D6004-115
FINISHED LENGTH = 104.91 ± 0.020
- 2) FINISH: CHEMICAL CONVERSION COAT PER DART QSI 005 4.1
PRIME INSIDE AND OUTSIDE PER DART QSI 005 4.2
PAINT OUTSIDE PER DART QSI 005 4.2
- 3) TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE NOTED.
- 4) UNITS: INCHES UNLESS OTHERWISE NOTED.
- 5) BREAK SHARP EDGES: 0.005 TO 0.010 MAX.
- 6) IDENTIFICATION: SCRIBE DART PART NUMBER "D206-667-243" AND BATCH NUMBER ON
INSIDE OF CUFF USING VIBRATING STYLUS.
- 7) WEIGHT: 21.9 lbs
- 8) PART IS SYMMETRIC ABOUT CENTERLINE
- 9) RUN CUTTER OFF PART WHERE INDICATED. BLEND OUT EDGE LONGITUDINALLY.
TRANSITION SHOULD BE SMOOTH.
- 10) BEND PROGRESSIVELY WITH A MINIMUM OF 8 PASSES. MAXIMUM TUBE FLATTENING DUE
TO BENDING IS 6% BASED ON O.D.
- 11) LIQUID PENETRANT: INSPECT OUTSIDE SURFACE OF CROSSTUBE PER QSI 038.
- 12) INSTALL D2892-1 SUPPORT USING 0.03" TO 0.06" THICK LAYER OF MAGNOBOND 6398 PER
QSI 015. LET CURE FOR 12 HOURS AFTER INSTALLATION AND PRIOR TO PACKAGING.
- 13) INSTALL MS21920-22 CLAMPS WITH D3595-063-450 RUBBER CUSHIONS TO SECURE THE
D2892-1 SUPPORT ON TOP SIDE OF THE CROSSTUBE. ENSURE CLAMP MECHANISMS ARE
LOCATED ON CROSSTUBE SUPPORTS.
- 14) EXTREME CARE MUST BE TAKEN TO PROTECT THE OUTSIDE SURFACE OF THE TUBE. THE
OUTSIDE SURFACE MUST BE SMOOTH AND FREE FROM SURFACE DEFECTS SUCH AS
SCRATCHES, NICKS, OR DENTS. DEFECTS UP TO 0.005" MAY BE BLENDED OUT
LONGITUDINALLY. CIRCUMFERENTIAL GRIND MARKS ARE UNACCEPTABLE.
- 15) TORQUE CLAMPS 80 TO 100 IN-LB. ENSURE AT LEAST 1.5 THREADS ARE SHOWING IN
SAFETY AND THAT NUT HAS NOT BOTTOMED-OUT AFTER TORQUING.

SHOP COPY
REVIEWED
FOR RELEASE
UNCOMPLETED
SHEET
NO. 62029
B10-915

RELEASED
08/11/2006

C	REVISE GENERAL NOTES/PART LIST (ZN D7-1); REORGANIZED VIEWS AND REFORMATTED DRAWING TO CURRENT STANDARDS. D3595-063-450 WAS D2858 400-773 (ZN D6-2 & A5-2); REMOVED REF. & ADD TOLERANCES (ZN A-3, C5-3, D3-3); RELOCATED FLAG #6 (ZN A8-3) PER NCR 210; MOVED TURNING DETAIL & UPDATED TOLERANCE TO SHEET 4.	RF	08.11.06
B	ADD HOLES AND NUT PLATES FOR COMPATABILITY WITH BHT/AA SKUDTUBES	PH	05.07.26
A	NEW ISSUE	CP	00.11.17
REV.	DESCRIPTION	BY	DATE
DESIGN	99	DART AEROSPACE LTD	
DRAWN	RF	HAWKESBURY, ONTARIO, CANADA	
CHECKED	10	DRAWING NO.	REV. C
MFG. APPR.	11	D206-667-243	SHEET 1 OF 4
APPROVED	12	TITLE	SCALE
DE APPR.	13	CROSSTUBE ASSY (206L HIGH AFT)	NTS
DATE	08.11.06	COPYRIGHT © 2006 BY DART AEROSPACE LTD THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL AND IS SUPPLIED ON THE EXPRESS CONDITION THAT IT IS NOT TO BE USED FOR ANY PURPOSE OTHER THAN THAT FOR WHICH IT WAS PROVIDED, NOR IS IT TO BE SHOWN TO ANY OTHER PERSON WITHOUT WRITTEN PERMISSION FROM DART AEROSPACE LTD.	

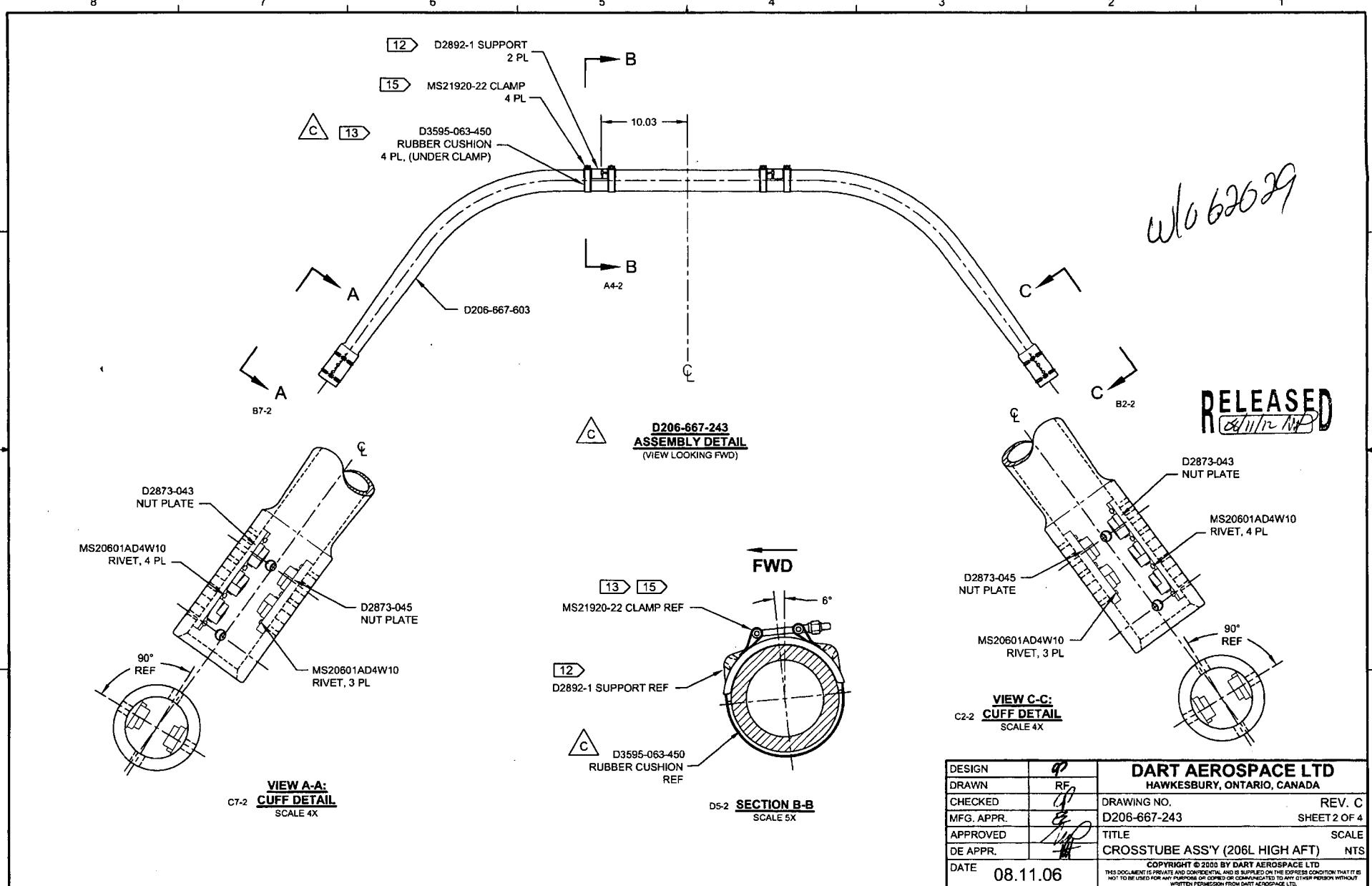
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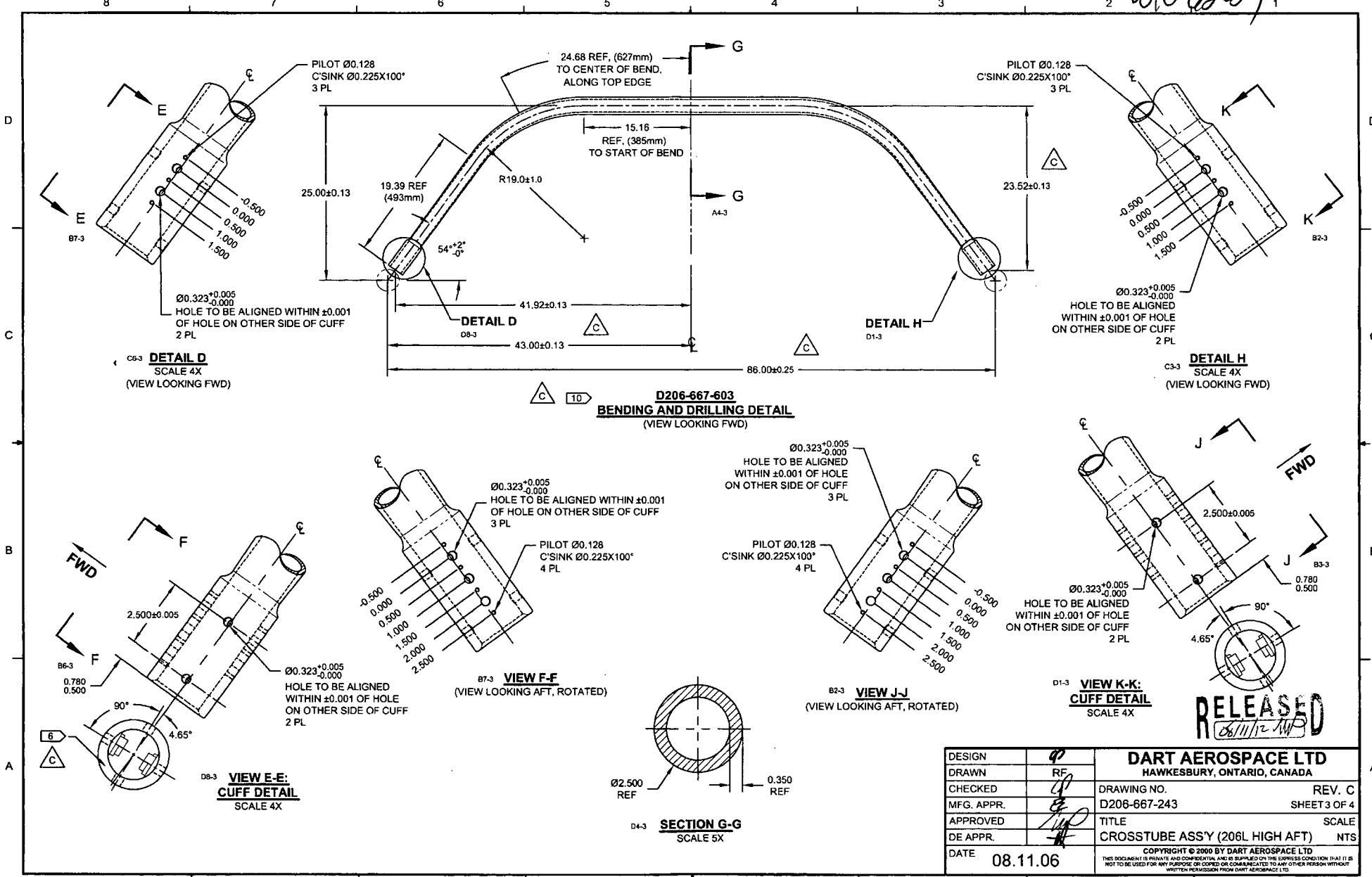
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2 WO 62029



DESIGN	90	DART AEROSPACE LTD		
DRAWN	RF	HAWKESBURY, ONTARIO, CANADA		
CHECKED	CP	DRAWING NO.	REV. C	
MFG. APPR.	EG	D206-667-243	SHEET 3 OF 4	
APPROVED	LP	TITLE	SCALE	
DE APPR.	HF	CROSSTUBE ASSY (206L HIGH AFT)	NTS	
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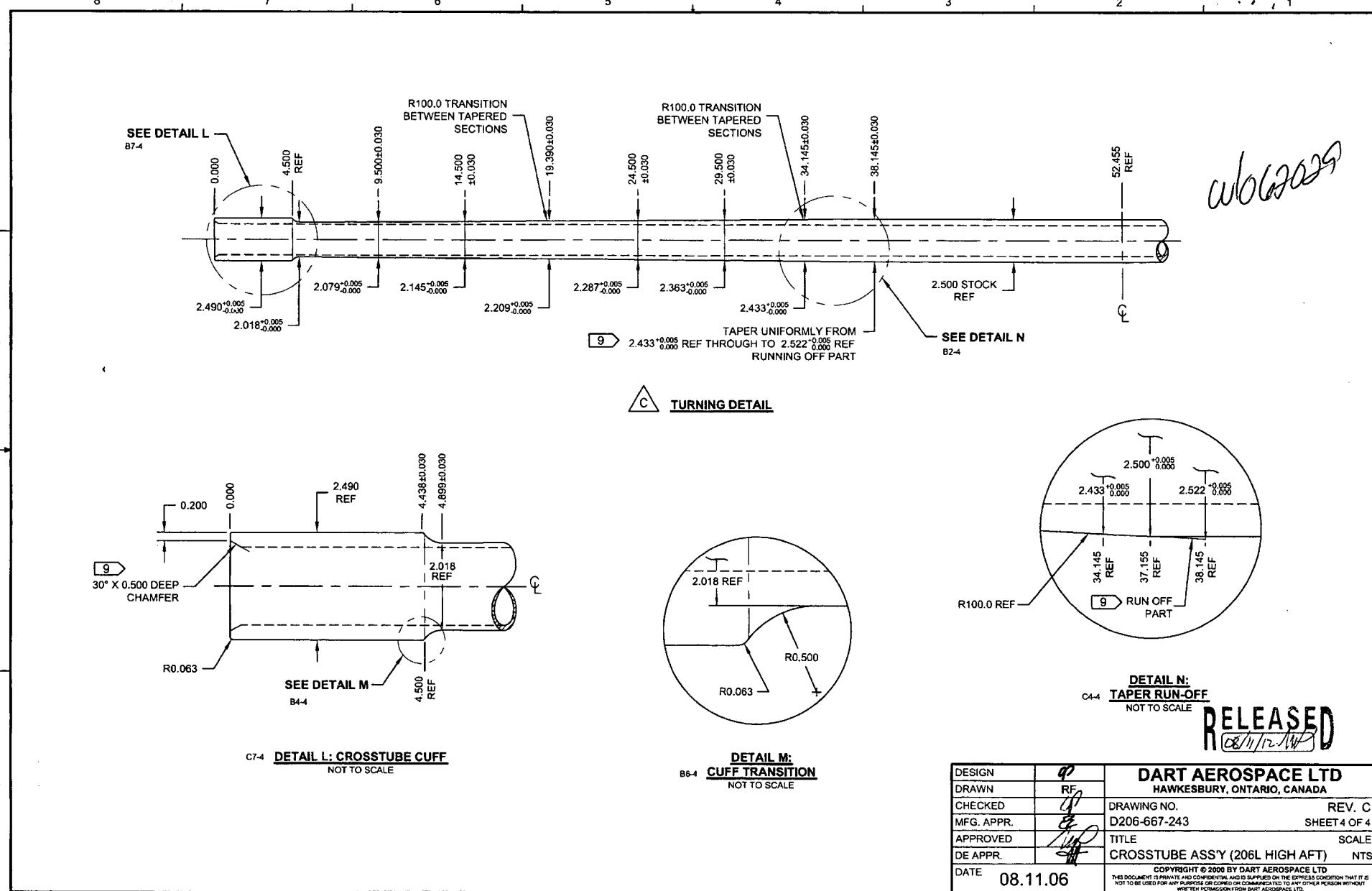
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DRAWN	REF	HAWKESBURY, ONTARIO, CANADA	
CHECKED	<i>Q</i>	DRAWING NO.	REV. C
MFG. APPR.	<i>Q</i>	D206-667-243	SHEET 4 OF 4
APPROVED	<i>Q</i>	TITLE	SCALE
DE APPR.	<i>Q</i>	CROSSTUBE ASSY (206L HIGH AFT) NTS	
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